We claim:

1.   A method of providing assertions comprising the steps of:

selling a pool of unallocated time;

5   upon request, generating an assertion having a lifetime and subtracting the lifetime from the unallocated time; and

upon request, revoking an assertion and adding any remaining lifetime of the assertion to the unallocated time.

10   2.   The method of claim 1 comprising the further step of eroding unallocated time over time.

3.   A system for managing assertions between names and public keys, the system comprising:

a repository containing an unallocated time, the
15   unallocated time indicating an amount of time available for assertions;

a purchase component adapted to add a requested bulk lifetime to the unallocated time;

a request component adapted to, upon generation of an
20   assertion having a requested lifetime, deduct the requested lifetime from the unallocated time; and

a revocation component adapted to, upon revocation of an assertion having a remaining lifetime, add the remaining lifetime to the unallocated time.

25   4.   The system of claim 3 wherein each assertion is a public key certificate.

5.   The system of claim 3 further adapted to:

        monitor when the unallocated time falls below a
threshold, and

        notify a user associated with the unallocated time if
5   the unallocated time falls below the threshold.

6.   The system of claim 3 wherein the request component
determines whether the requested lifetime is greater than the
unallocated time, and if the requested lifetime is greater than
the unallocated time, presents the user with a set of options
10 for remedying the insufficiency of the unallocated time.

7.   A processing platform implemented method of
processing a request for an assertion between a name and a
public key, the method comprising the steps of:

        maintaining an unallocated time, the unallocated time
15 being time available for assertions;

        accepting a request for an assertion and a requested
lifetime;

        determining whether the unallocated time is greater
than or equal to the requested lifetime; and

20   upon determining that the unallocated time is greater
than or equal to the requested lifetime, deducting the
requested lifetime from the unallocated time.

8.   The method of claim 7 comprising the further step of
forwarding the request for an assertion to an entity
25 responsible for generating assertions.

9.   The method of claim 7 wherein the assertion is a
public key certificate.

10.   The method of claim 7 comprising the further step of eroding the unallocated time over time.

11.   A processing platform implemented method of processing a request for revocation of an assertion between a
5 name and a public key, the method comprising the steps of:

maintaining an unallocated time, the unallocated time being time available for assertions;

identifying an assertion to be revoked, the assertion having a remaining lifetime; and

10   adding the remaining lifetime to the unallocated time.

12.   The method of claim 11 wherein the assertion is a public key certificate.

13.   A memory for storing data for access by an
15 application program being executed on a data processing system, comprising:

a data structure stored in the memory, the data structure including information resident in a database used by the application program and including at least one entry, each
20 entry including:

an account identification field which identifies an account;

a user identification field which provides access control to the account; and

25   an unallocated time field which identifies an amount of time available to the account for allocation to assertions between names and public keys.

14.   An article of manufacture comprising a computer-readable storage medium, the computer-readable storage medium containing instructions for:

5 generating an entry in a repository, the entry including an unallocated time;

receiving a request for a purchase of bulk lifetime;

adding the bulk lifetime to the unallocated time, in the event that a request for a purchase of bulk lifetime is received;

10   receiving a request for an assertion and a requested lifetime, the assertion being between a name and a public key;

deducting the requested lifetime from the unallocated time, in the event that a request for an assertion is received;

receiving an identification of an assertion to be
15 revoked, the assertion having a remaining lifetime; and

adding the remaining lifetime to the unallocated time, in the event that an identification of an assertion to be revoked is received.

15.   A system for allocating assertions comprising:

20   means for allocating a pool of unallocated time available for assertion validity;

means for processing a request for an assertion having a lifetime, the means for processing the request subtracting the lifetime from the unallocated time; and

25   means for processing a revocation of an existing assertion by determining any remaining lifetime of the existing

assertion and adding at least a portion of the remaining lifetime of the assertion to the unallocated time.

16.   The system of claim 15 further comprising:

       means for monitor when the unallocated time falls
5   below a threshold, and for notifying a user associated with the unallocated time if the unallocated time falls below the threshold.